

(19) World Intellectual Property
Organization
International Bureau



543046

(43) International Publication Date
12 August 2004 (12.08.2004)

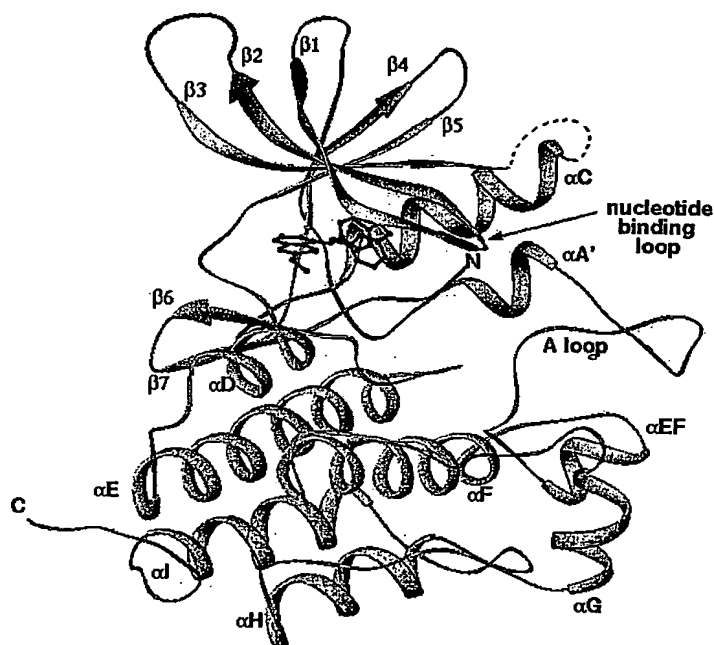
PCT

(10) International Publication Number
WO 2004/066921 A2

- (51) International Patent Classification⁷: **A61K**
- (21) International Application Number:
PCT/US2004/001291
- (22) International Filing Date: 20 January 2004 (20.01.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/441,443 21 January 2003 (21.01.2003) US
- (71) Applicant (for all designated States except US):
SMITHKLINE BEECHAM CORPORATION
[US/US]; One Franklin Plaza, Philadelphia, PA 19101 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **SHEWCHUK, Lisa, Marie** [CA/US]; C/o Glaxosmithkline, Five Moore Drive, Po Box 13398, Research Triangle Park, NC 27709 (US). **HASSELL, Anne Moore** [US/US]; C/o Glaxosmithkline, Five Moore Drive, PO Box 13398, Research Triangle Park, NC 27709 (US). **BRIGNOLA, Perry,**
- (74) Agents: **LEVY, David, J. et al.**; Glaxosmithkline, Corporate Intellectual Property Dept, Five Moore Drive, P.O. Box 13398, Research Triangle Park, NC 27709 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,

[Continued on next page]

(54) Title: ERBB4 CO-CRYSTAL



(57) Abstract: A crystal structure of the ErbB4 kinase domain (ErbB4K), specifically the ErbB4K in liganded form as well as methods of using the same in the discovery of ErbB4 inhibitors. Disclosed further are methods of treatment of diseases mediated by inappropriate ErbB4 activity utilizing ErbB4 inhibitors identified by the methods disclosed herein.

WO 2004/066921 A2



TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

- *without international search report and to be republished upon receipt of that report*